I claim:

1. A teaching method for training students in molecule identification from nuclear magnetic resonance spectra comprising the steps of:

providing said spectra to said students;

identifying chemical fragments from said chemical shift on said spectra;

determining the number of hydrogens which each peak on said spectra represents from integration;

accessing the splitting pattern on said spectra caused by neighboring hydrogens;

second providing a plurality of individual, three dimensional, chemical fragment-defining cutouts representing a range of chemical fragments having corresponding distinctive configurations in which each of said cutouts is of a predetermined size relative to that of the other cutouts;

selecting cutouts representative of said chemical fragments identified from said spectra; and

arranging said selected cutouts to determine the identity of said molecule.

2. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 1 wherein said cutouts have a number of sides corresponding to the number of bonds present around the central atom of said chemical fragment represented by said cutout;

3. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 2 wherein said second providing step further comprises providing cutouts with flat sides indicative of bonding sides and curved sides indicative of hydrogen bonding sides.

4. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 3 wherein said second providing step further comprises providing cutouts with concavities and convex tabs on said bonding sides when said cutout is to be mated with another said cutout representing a chemical fragment that causes observable splitting of the peak of said nuclear magnetic resonance spectra.

5. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 4 wherein said concavities of said second providing step are indicative of the chemical fragment represented by said cutout.

6. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 4 wherein said convex tabs of said second providing step are indicative of the chemical fragment represented by a mating cutout.

7. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 4 wherein said second providing step further comprises incorporating a shape of said convex tabs on said cutouts indicative of the number of hydrogens from said mating cutouts.

8. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 4 wherein said second providing step further comprises incorporating a shape of said concavities on said cutouts indicative of the number of hydrogens from said cutout.

9. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 3 wherein said second providing step further comprises providing cutouts with a first design and a second design on said bonding sides when said cutout is to be mated with another said cutout representing a chemical fragment that causes observable splitting of the peak of said nuclear magnetic resonance spectra.

10. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 9 wherein said first design of said second providing step is indicative of the chemical fragment represented by said cutout.

11. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 9 wherein said second design of said second providing step is indicative of the chemical fragment represented by a mating cutout.

12. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 9 wherein said second design of said second providing step is indicative of the number of hydrogens from said mating cutouts.

13. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 9 wherein said first design of said second providing step is indicative of the number of hydrogens from said cutout.

14. A teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra comprising:

a plurality of individual, three dimensional, chemical fragment-defining cutouts representing a range of chemical fragments having corresponding distinctive configurations in which each of said cutouts is of a predetermined size relative to that of the other cutouts.

15. The teaching method for training students in molecule identification from nuclear magnetic resonance spectra of Claim 14 wherein said cutouts have a number of sides corresponding to the number of bonds present around the central atom of said chemical fragment represented by said cutout.

16. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 15 wherein said sides when flat are indicative of a bonding side and said sides when curved are indicative of a hydrogen bonding side.

17. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 15 wherein said cutouts further comprise concavities and convex tabs on said bonding sides when said cutout is to be mated with another said cutout representing a chemical fragment that causes observable splitting of the peak of said nuclear magnetic resonance spectra.

18. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 17 wherein said concavities are indicative of the chemical fragment represented by said cutout.

19. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 17 wherein said convex tabs are indicative of the chemical fragment represented by a mating cutout.

20. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 17 wherein the shape of said convex tabs on said cutouts is indicative of the number of hydrogens for said mating cutouts.

21. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 17 wherein the shape of said concavities on said cutouts is indicative of the number of hydrogens from said cutout.

22. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 16 wherein said cutouts further comprise a first design and a second design on said bonding sides when said cutout is to be mated with another said cutout representing a chemical fragment that causes observable splitting of the peak of said nuclear magnetic resonance spectra.

23. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 22 wherein said first design is indicative of the chemical fragment represented by said cutout.

24. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 22 wherein said second design is indicative of the chemical fragment represented by a mating cutout.

25. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 22 wherein said first design is indicative of the number of hydrogens for said cutouts.

26. The teaching apparatus for training students in molecular identification from nuclear magnetic resonance spectra of Claim 22 wherein second design is indicative of the number of hydrogens from said mating cutout.

27. A teaching method for training students in molecule identification from nuclear magnetic resonance spectra comprising the steps of:

providing said spectra to said students;

identifying chemical fragments from said chemical shift on said spectra;

determining the number of hydrogens which each peak on said spectra represents from integration;

accessing the splitting pattern on said spectra caused by neighboring hydrogens;

second providing a plurality of individual, three dimensional, chemical fragment-defining cutouts representing a range of chemical fragments having corresponding distinctive configurations in which each of said cutouts is of a predetermined size relative to that of the other cutouts, said cutouts having a number of sides corresponding to the number of bonds present around the central atom of said chemical fragment represented by said cutout;

selecting cutouts representative of said chemical fragments identified from said spectra; and

matching said selected cutouts according to said distinctive configurations while excluding all incorrect matches to determine the identity of said molecule.

28. A teaching method for training students in molecule identification from nuclear magnetic resonance spectra comprising the steps of:

accessing information from said spectra;

providing a plurality of individual, three dimensional, chemical fragment-defining cutouts representing a range of chemical fragments having corresponding distinctive configurations in which each of said cutouts is of a predetermined size relative to that of the other cutouts, said cutouts having a number of sides corresponding to the number of bonds present around the central atom of said chemical fragment represented by said cutout; and

matching said cutouts according to said distinctive configurations while excluding all incorrect matches to determine the identity of said molecule.